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ABSTRACT

Patterns of enrollment at major U.S. research universities from 1965 to 1977 are examined in terms of headcounts, full-time equivalent students, and full-time and part-time students by type of institutional control, by sex, and by level of study. Data are presented for two groups of research universities: (1) the 51 leading universities in terms of federal financial support of academic science in at least two of the three academic years, 1972-73, 1973-74, and 1974-75; and (2) 47 universities from the list of the 100 leading institutions in terms of federal financial support in at least two of three years between 1972-73 and 1974-75. The universities must also have awarded at least 50 Ph.D.'s (plus M.D.'s), and have met other criteria. Findings include the following: the 51 group one major research universities have been characterized by relatively stable enrollments over the past 13 years; while total U.S. full-time enrollments were increasing by almost 4 percent a year during the 13 years, full-time students at the 51 universities increased at half that rate; the entire increase in enrollment at the 51 universities was accounted for by additional women students; the 47 group two research universities increased in enrollment at a slightly higher rate than the first group of research universities but considerably lower than the national increase; the greatest enrollment gain was in the 33 public institutions; the 47 universities showed strong and steady gains of women students; and undergraduate and graduate full-time enrollments at the 47 universities have been relatively stable but part-time enrollments at both levels have fluctuated. (SW)

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**PATTERNS OF ENROLLMENT
IN HIGHER EDUCATION:**

1965 TO 1977

RESEARCH UNIVERSITIES

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**PATTERNS OF ENROLLMENT
IN HIGHER EDUCATION:
1965 TO 1977
RESEARCH UNIVERSITIES**

by

**Kenneth Brown
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Larry Leslie**

**Center for the Study of Higher Education
College of Education
University of Arizona**

**Topical Paper No. 17
September, 1979**

FOREWORD

This paper is the first in a series of enrollment analyses to be published periodically by the Center for the Study of Higher Education at the University of Arizona. The series will include analyses of enrollments in each of the six Carnegie classifications and a number of other categories which cut across these classification, including women's colleges, predominantly black institutions, institutions with religious control, AASCU institutions, and other categorizations. Analyses by geographical areas and by urban and rural settings will also be forthcoming as the data are assembled, edited, and analyzed. It is anticipated that the series will be useful to students of higher education in understanding the most dynamic period of enrollment growth this country has yet experienced, the period between 1965 and 1977, and in anticipating what is likely to lie ahead.

Data for these years in varying degrees of detail have been assembled on computer tapes for all institutions in the *Educational Directory* responding to the Higher Education General Information Survey (HEGIS) of the Office of Education. These data were combined initially by Dr. Daryl Carlson for the National Center for Education Statistics under grant number 500-75-0382. Editing of these data was undertaken by the Center for the Study of Higher Education at the University of Arizona in September of 1977. Although the original computer tape was excellently organized and documented, some revisions were necessary. Two types of problems were encountered: the first involved the editing of content, the second involved categorizations of data.

Editing of content included supplying missing entries and correcting data which were obviously in error. Missing enrollment data were obtained from copies of *Opening Fall Enrollments* published by the Office of Education¹ and when not available there from communications with the institutions involved. If both of these sources failed to supply the missing data, reasonable extrapolations were determined by comparing prior with later or later with prior years. Missing data involving the geographical location of institutions were obtained from the *Directory of Higher Education* and missing classifications for inner city, outer ring and rural areas were determined through the use of an atlas. Duplicate and incorrect FICE numbers² were eliminated and corrected, and mergers and liquidations were identified.

¹ The entire year of 1969, for example, had data in summarized forms only on the computer tape; details had to be reconstructed from hard copy.

² These are unique numbers supplied each institution of higher education in the *Directory of Higher Education*, a process agreed upon the the Federal Interagency Committee on Education.

Problems in categorization were far more complicated, although they were not as time-consuming as the first set of problems. Unfortunately, the data categories included in the fall enrollment questionnaire of the Office of Education's annual survey did not remain consistent throughout the period recorded on the tapes. In 1965 and 1966 undergraduate and graduate enrollments were not reported separately in the government enrollment questionnaires. In 1967 and 1968 the category **post-baccalaureate** was introduced, and these enrollments were reported separately from undergraduates. The post-baccalaureate category unfortunately included graduate, first-professional as well as students pursuing further undergraduate study after obtaining a baccalaureate degree (teacher certification candidates for example). The questionnaires were identical for the years 1969 through 1972. In 1973 the HEGIS enrollment questionnaire was revised somewhat by combining two undergraduate categories and not requesting extension enrollments to be reported separately. Extension enrollments were not reported separately in 1965 nor in 1968 but were reported in every other questionnaire until the year 1973. The 1969 through 1972 questionnaires have the largest number of categories of all the surveys prior to the 1976 questionnaire. The data categories on the file for each year, with one or two minor variations, reflect the categorizations reported on the questionnaires.

Whenever no reasonable separation of categories could be defended, no attempt to analyze these categories was made for the years involved. Thus, graduate and undergraduate disaggregations and analyses are not attempted for 1965 and 1966. This is the reason tables and figures in the study do not all begin with the year 1965. In some cases it was possible to redistribute categories such as part-time or full-time and graduate and undergraduate subclassifications based upon ratios of these subcategories in prior or later years. Thus if an institution reported unclassified students for several years but missed an intermediate year, ratios of both undergraduate and graduate unclassified students would be interpolated in accordance with their proportions in prior and later years.

Table C in Appendix B gives categories available on the tapes by years. The reader will be able to gauge from this the extent of the variation in classifying the data from year to year. The authors are satisfied that every reasonable attempt has been made to render the data in a format conducive to accurate analyses. Indeed, we are confident that the data, which often have been criticized in the past, are now capable of lending valid conclusions.

Enrollment data were assembled by the Center not only as a source for the analyses that will be published in this series but also as a data base for forecasting enrollment growth for various segments of higher education. Most national enrollment projections fail to disaggregate by type of institution; yet it is evident that different kinds of institutions have experienced and will continue

to experience different kinds of growth. Some, like the community colleges, have shown marked increases, particularly the urban community colleges. Others such as the liberal arts colleges have not grown as much, either by design or because they have been unable to compete financially or academically with other institutions.

It is not valid for governing and funding bodies at the state level nor for policy and funding bodies at the federal level to make their planning decisions from aggregated data. As a matter of fact, such procedures may be harmful to particular institutions. In times of retrenchment, growing segments of higher education could find themselves cut back along with those whose enrollments are falling. For this reason, it is desirable to disaggregate enrollment projections as much as possible for institutional sectors, for states, regions, and at the national level.

The historical data assembled for this series along with the many additional classification codes we have built into the data will permit us to identify, first, the overall patterns into which specific institutions fit; identify, second, the variables attending a particular enrollment pattern; and, third, allow projections of single institutions or groups of institutions based upon the models that will be developed.

In closing this foreword, it should be noted that the period of time encompassed in these analyses will be remembered as a turbulent one for higher education. It was a period in which universities and colleges fell from high estate to low in the eyes of the public and the legislators; it was tragedy in both the Aristotelian and the common definition of the word. Yet it was also a period in which this medieval monolith modernized and popularized itself even further. It is a period justifying close examination.

PATTERNS OF ENROLLMENTS IN HIGHER EDUCATION: 1965 TO 1977

RESEARCH UNIVERSITIES

It was the best of times, it was the worst of times. . . it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us. . .

Charles Dickens, *A Tale of Two Cities*

Analyses of enrollment changes in the years between 1965 and 1977 are particularly challenging because this time-span includes a number of significant

forces affecting the trends. At the very beginning of the period, the tides of post-World War II births still swell, and federal facilities grants help create new campuses and expand old ones. Toward the end of the era, the declining birth rates of the late 50's begin to wash out enrollment gains and construction dollars dwindle. Student unrest and its aftermath, the return of the Vietnam veterans, and the end of the draft all took place in this period. During these years, the Vietnam veterans received a number of benefit increases and then began phasing out of their entitlements. The Nation undertook also in this interval the post-secondary enlightenment of the disadvantaged. In the second half of the 60's and the first half of the 70's, the tremendous surge of the community college movement is felt, delivering higher education to new communities and different clientele. And sometimes in response to both territorial disputes and educational outreach, this also became the golden age of the branch campus. At the late end of the span, new forms and amounts of student aid became available with ominous implications for the great American middle class. Throughout the interval there is a steadily increasing popular compulsion for credentialization with the consequent inflation of public and private costs, resulting in a state and local budgetary disenchantment with the multifoliate growth of public higher education.

It was the best of times; it was the worst of times. And we propose to examine these times in terms of the changes taking place in headcounts, full-time-equivalent, and full- and part-time students by control, by sex, and by undergraduate and graduate students in Research Universities I and II (see Appendix A, page 45, for a list of these institutions).

The National Scene

Total enrollments (both degree and non-degree credit) in all institutions of higher education in this country very nearly doubled since 1965. Five and a half million more students attended colleges and universities in the fall of 1977 than did so in 1965. Of that enormous growth, public institutions absorbed five million and private half a million additional students (data and illustrations are contained in Figures 1 and 2 and Tables I and II).

Since 1965 the average annual enrollment growth for all types and levels of public and private colleges and universities has been a little over 7.5 percent with the largest percentage gains in the early and late seventies with some loss of enrollment between 1975 and 1976.

Enrollment in public colleges and universities has more than doubled since 1965; private enrollment has increased by 27 percent. This pattern of growth continues a long-term trend with public institutions absorbing or promoting the

INDICES OF ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I (PUBLIC AND PRIVATE)

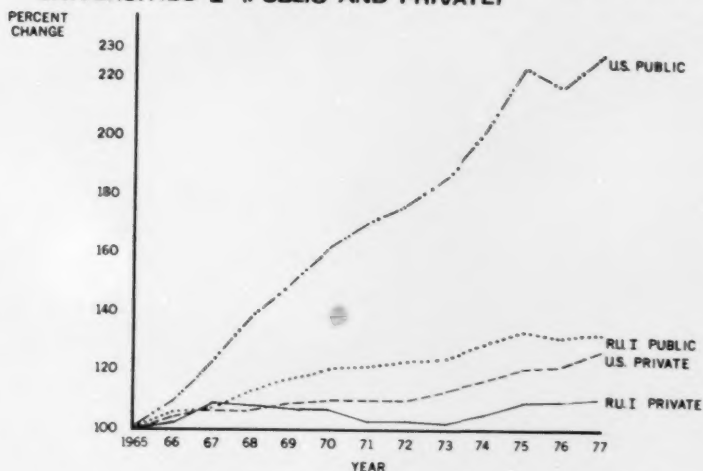


FIGURE 1

SOURCES: ACE FACT BOOK
CHRONICLE OF HIGHER EDUCATION
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF FULL AND PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

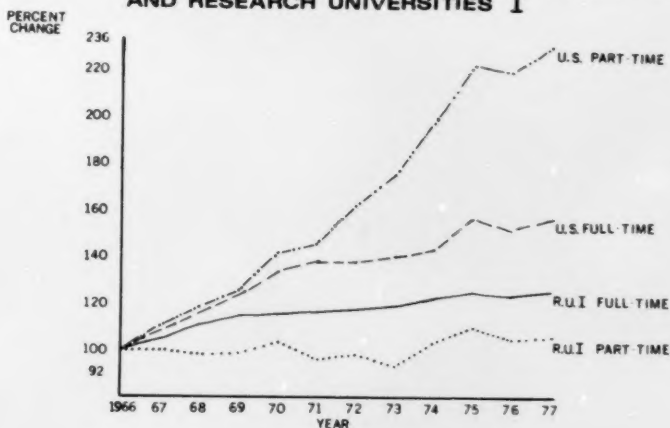


FIGURE 2

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

Table I. Full-time-equivalent and Headcount Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FTE				HEADCOUNT			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1965	4,826*	100.0	777,710	100.0	5,962*	100.0	924,321	100.0
1966	5,126	106.2	800,211	102.9	6,439	108.0	951,576	102.9
1967	5,539	114.8	842,945	108.4	6,964	116.8	995,081	107.7
1968	6,024	124.8	877,490	112.8	7,571	127.0	1,026,994	111.1
1969	6,346	131.5	907,362	116.7	7,979	133.8	1,057,971	114.5
1970	6,793	140.8	919,718	118.3	8,649	145.1	1,077,820	116.6
1971	7,096	147.0	922,645	118.6	9,025	151.4	1,071,566	115.9
1972	7,187	148.9	930,614	119.7	9,297	155.9	1,081,331	117.0
1973	7,403	153.4	940,050	120.9	9,695	162.6	1,084,233	117.3
1974	7,735	160.3	962,465	123.8	10,321	173.1	1,119,742	121.1
1975	8,379	173.6	987,392	127.0	11,291	189.4	1,154,453	124.9
1976	8,242	170.8	979,275	125.9	11,121	186.5	1,137,242	123.0
1977	8,436	174.8	990,446	127.3	11,479	192.5	1,150,049	124.4

*Non-Degree Registrations Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.

The Chronicle of Higher Education, January 9, 1979.

Table II. Public and Private Headcount Enrollments and Indices of Growth:
U.S. and Research Universities I.

	PUBLIC				PRIVATE			
	United States		Research Universities I		United States		Research Universities I	
	N	INDEX	N	INDEX	N	INDEX	N	INDEX
1965	3,999,940	100.0	667,127	100.0	1,967,471	100.0	257,194	100.0
1966	4,381,086	109.5	692,268	103.8	2,057,391	104.6	258,608	100.5
1967	4,850,330	121.3	716,501	107.4	2,113,357	107.4	278,580	108.3
1968	5,469,492	136.7	747,999	112.1	2,102,164	106.8	278,995	108.5
1969	5,939,513	148.5	779,350	116.8	2,126,720	108.1	278,621	108.3
1970	6,476,058	161.9	801,998	120.2	2,173,310	110.5	275,822	107.2
1971	6,854,685	171.4	808,663	121.2	2,170,346	110.3	262,903	102.2
1972	7,122,875	178.1	818,932	122.8	2,174,912	110.5	262,399	102.0
1973	7,478,407	187.0	823,705	123.5	2,215,890	112.6	260,528	101.3
1974	8,049,595	201.2	849,308	127.3	2,271,944	115.5	270,434	105.1
1975	8,896,021	222.4	876,747	131.4	2,394,698	121.7	277,706	108.0
1976	8,712,634	217.8	858,173	128.6	2,408,792	122.4	279,069	108.5
1977	8,985,175	224.6	868,256	130.1	2,502,792	127.2	281,793	109.6

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

largest share of enrollment increases either through the growth of existing institutions or the development of new ones. Most significant in the expansion of the public sector was the burgeoning of the community colleges. These institutions account for almost 60 percent of the entire enrollment increase in the public sector between 1965 and 1977.

Against this background of national growth, it is interesting to contrast the changes that have occurred in different types and levels of institutions. We have chosen for the first in a series of analyses the changing patterns of enrollment within institutions in the various Carnegie classifications, beginning in this issue with Research Universities I and II (see Appendix A for a list of these institutions).

RESEARCH UNIVERSITIES I

Summary of Findings

- The fifty-one major research universities in the United States have been characterized by relatively stable enrollments over the past thirteen years. Their average annual enrollment increase of 2 percent compares to a 7.7 percent annual rate for all U.S. institutions. The average annual gain in the public Research Universities I (RU's I) was 2.5 percent between 1965 and 1977; at the private it was slightly less than 1 percent.
- While total U.S. full-time enrollments were increasing by almost 4 percent a year between 1965 and 1977, full-time students at RU's I increased at half that rate. During the period of decrease in national enrollments in 1976, RU's I full-time enrollment decreased at a more moderate rate. Part-time enrollments fluctuate more than full time and seem to be more susceptible to outside influences such as government policy, changes in the draft, and in veteran's benefits, as well as changes in employment rates.
- The entire increase in enrollment at the fifty-one major research universities since 1969 was accounted for by additional women students. Male enrollments actually decreased.
- Male part-time enrollments at Research Universities I decreased almost 19,000 over the twelve-year span analyzed, but enrollments of part-time women were up by 38,000.

Headcount Increases

The fifty-one major research universities in the United States gained almost a quarter of a million additional students between 1965 and 1977 (see Table I).

This represented 4 percent of the total increase in degree and non-degree credit at all institutions in the nation over that period. The Research Universities I increased their headcount enrollments by approximately 2 percent a year for a 24 percent increase over the thirteen-year period. This annual growth of 2 percent compares to a 7.7 percent annual rate for higher education institutions as a whole. Clearly RU's I grew at a relatively slower rate when compared with other types of institutions (see Figure 1).

When the quarter of a million gain is looked at separately for public and private RU's I, it becomes apparent that a little under 200,000 of that increase was absorbed by the public RU's I and a little over 25,000 by the private. The average annual gain in the major public research universities was 2.5 percent a year between 1965 and 1977; at the private it was a little under 1 percent a year (see Figure 1 and Table II).

In the period between 1968 and 1973, **private** Research Universities I lost almost eighteen and a half thousand students for a 7 percent decrease over the five-year span (see Figure 1). This was during a period when veteran enrollments were increasing nationally, partially as a result of increasing benefits, and partially as a result of a period of high unemployment beginning in 1970.

Public RU's I also experienced a loss of eighteen and a half thousand students, but rather than over a five-year period this occurred as a single drop, between 1975 and 1976. In 1976 three factors combined to reverse enrollment gains across the country: veteran's entitlements began phasing out, unemployment rates began to drop after reaching their highest peak in a decade, and lower birth rates of the late fifties began eroding the increases in the 18- to 24-year-old cohort.

These three variables had little effect on the private RU's I, which in fact showed a slight gain between 1975 and 1976 (see Figure 1 and Table II).

Full-Time-Equivalent Increases

As witnessed by the indices in Table 1, FTE (full-time plus one-third of part-time) enrollments in RU's I gained at a faster rate than headcount enrollments. The reverse was true nationally: for the U.S. the headcount index grew to 192.5, while the FTE index grew to 174.8. The comparable RU's I indices were 124.4 and 127.3 (FTE data are captured in the full-time, part-time tables and graphs).

Full-time-equivalent enrollments have increased at a slightly higher rate than headcounts in public RU's I and at a substantially higher rate than headcounts in

the private. This indicates that the proportions of full-time students have gained more at both public and private institutions relative to part-time students, with the gain greatest at the private institutions. **Public** RU's I have shown a remarkable stability in the relationship of full-time-equivalent students to headcount throughout the period 1965 to 1977. This is another way of saying that full- and part-time students have remained a consistent proportion of total enrollments throughout the period. Full-time-equivalent students for these major public research universities have remained about 87 percent of the total headcount without deviating more than a percentage point up or down for the thirteen-year period (see Table I for combined public-private FTE).

Full-time-equivalent students represent a smaller percentage of headcounts at **private** Research Universities I, and the year-to-year fluctuation in this relationship is greater than at the public. The private RU's I gained in full-time-equivalents as a proportion of headcount up to 1972. The percentage has apparently plateaued at 82 percent since then (see Table I for FTE and headcount enrollments of the U.S. and Research Universities I).

Full-Time Students

Full-time students represented three-fifths of all students in the United States in 1977; in Research Universities I, they represented a larger share, almost four-fifths (see Table III).

There are a number of reasons why this is so. Most prestigious research universities tend to attract students whose careers can best be fulfilled through full-time attendance: strong graduate and professional programs, for example, usually require full-time commitments. More of the students who attend such institutions are liable to be supported for full-time attendance by their families.

Many research universities also tend to attract large numbers of out-of-state students, who because of high tuition and room and board costs generally avoid part-time attendance. With minor exceptions, relatively high tuition costs at private research universities tend to discourage part-time attendance also.

Although some urban campuses offer programs designed to serve the needs of part-time students, many of the research universities do not provide strong evening programs or offer other inducements for limited attendance.

Large and relatively stable full-time enrollments seem therefore more consistent with the mission of research universities than with institutions charged primarily with responses to local or state needs. It should therefore be expected that these institutions would demonstrate relatively stable enrollments, particularly in regard to the most stable enrollment pool, the full-time students.

Table III. Full- and Part-Time Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FULL-TIME				PART-TIME			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1966	4,470	100.0	724,528	100.0	1,969	100.0	227,048	100.0
1967	4,827	108.0	766,877	105.7	2,137	108.5	228,204	100.5
1968	5,250	117.4	802,738	110.8	2,321	117.9	224,256	98.8
1969	5,529	123.7	832,058	114.8	2,450	124.4	225,913	99.5
1970	5,865	131.2	840,667	116.0	2,784	141.4	237,153	104.4
1971	6,132	137.2	848,184	117.1	2,893	146.9	223,382	98.4
1972	6,131	137.2	855,255	118.0	3,166	160.8	226,076	99.6
1973	6,257	140.0	867,959	119.8	3,438	174.6	216,274	95.3
1974	6,442	144.1	883,827	122.0	3,879	197.0	235,915	103.9
1975	6,923	154.9	903,862	124.8	4,368	221.8	250,591	110.4
1976	6,803	152.2	900,292	124.3	4,318	219.3	236,950	104.4
1977	6,910	154.6	910,644	125.7	4,578	232.5	239,405	105.4

SOURCES: *Opening Fall Enrollments in Higher Education*, 1966 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

This is precisely what has occurred during a period of dynamic enrollment change for higher education in general. While total U.S. full-time enrollments were growing by almost 4 percent per year between 1965 and 1977, full-time students at Research Universities I increased at half that rate. Conversely in 1976 when U.S. full-time enrollments were down, full-time enrollments in RU's I decreased at a more moderate rate (see Table III and Figure 2).

In summary, the fifty-one elite public and private research universities have experienced greater stability in full-time enrollments than have all institutions combined, and this stability bodes well for the missions these institutions serve (see Figure 3 and Table IV).

Part-Time Students

Although caution should be exercised in analyzing data for part-time students because of periodic changes in definitions¹, it is clear that the growth at RU's I has been much less than for all institutions combined (see Figure 2 and Table III). While national part-time enrollments from 1966 to 1977 were growing dramatically by 2.6 million or 133 percent, in RU's I part-time enrollment increased by slightly more than 5 percent. Within this period, the portion of all enrollments attributable to part-timers remained essentially unchanged in RU's I, decreasing slightly from 24 percent to 21 percent over the period while nationally part-time students increased their total enrollment share from 31 to 40 percent (see Table III).

Clearly, major research and doctorate granting universities did not share in the large national increases in part-time enrollments from 1965 to 1977. In general these institutions appeared to continue what they were about while other types of institutions were responding to the growing pool of part-time students (see Figure 4).

Part-time students represent a larger share of total enrollments at the private RU's I than at the public (see Figure 4). In the private RU's I in 1977, they account for 27 percent of the total full- and part-time enrollment and in the public 19 percent. This difference however is due to three large private urban institutions with extremely large evening programs. These three institutions account for almost half of the part-time enrollments in private RU's I. Discounting these three institutions, the proportion of part-time students at private RU's I is equivalent to the proportion at the public ones. It was pointed out earlier that the twenty-two **private** research universities lost over eighteen

¹ Telephone conversations with university representatives indicated that major definitional changes have caused the inclusion or exclusion of short-course, workshop, and conference attendees in part-time aggregation. Institutional data were adjusted whenever possible in recognition of this problem.

Table IV. Full-Time Public and Private Enrollments and Indices of Growth:
U.S. and Research Universities I.

	PUBLIC				PRIVATE			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1965	2,555*	100.0	533,065	100.0	1,382*	100.0	171,337	100.0
1966	2,967*	116.1	548,629	102.9	1,503*	108.8	175,899	92.2
1967	3,281	128.4	574,831	107.8	1,546	111.9	192,046	112.1
1968	3,684	144.2	605,853	113.7	1,566	113.3	196,885	114.9
1969	3,948	154.5	632,043	118.6	1,594	115.3	200,015	116.7
1970	4,249	166.3	638,405	119.8	1,616	116.9	202,262	118.1
1971	4,503	176.2	654,016	122.7	1,629	117.9	194,168	113.3
1972	4,504	176.3	658,824	123.6	1,627	117.7	196,431	114.7
1973	4,624	181.0	676,030	126.8	1,632	118.1	191,929	112.0
1974	4,781	187.1	685,575	128.6	1,661	120.2	198,252	115.7
1975	5,179	202.7	703,346	131.9	1,744	126.2	200,516	117.0
1976	5,039	197.2	695,877	130.5	1,763	127.6	204,415	119.3
1977	5,084	199.0	704,024	132.1	1,826	132.1	206,620	120.6

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF FULL-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I (PUBLIC AND PRIVATE)

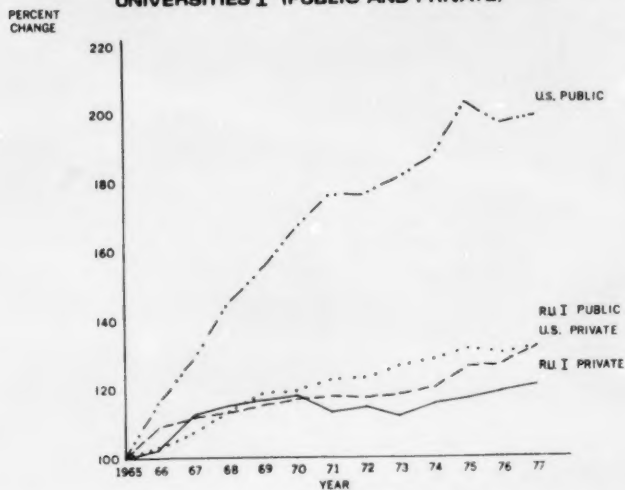


FIGURE 3

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1965-1977, NCES.

HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I (PUBLIC AND PRIVATE)

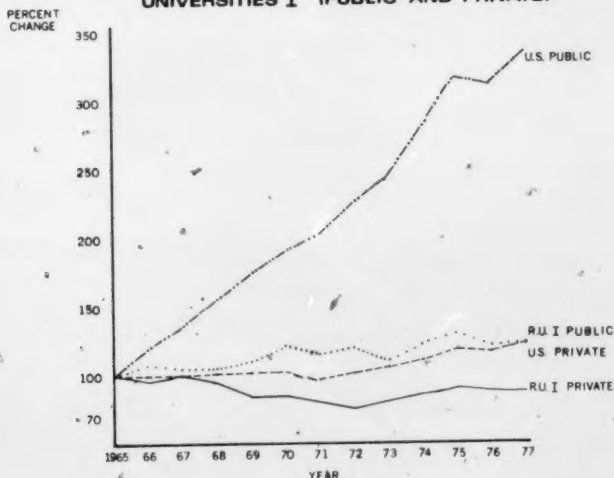


FIGURE 4

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1965-1977, NCES.

HEGIS ENROLLMENT DATA (COMPUTER TAPES)

THE CHRONICLE OF HIGHER EDUCATION, JANUARY 9, 1978.
NOTE: U.S. PUBLIC AND PRIVATE PART-TIME ENROLLMENT GROWTH
ESTIMATED TO 1969.

thousand students between 1968 and 1973. The largest share of this is attributable to losses of part-time enrollments (see Figure 4). In the period 1965 to 1974, tuition and fees at private universities more than doubled, increasing from \$1,300 to \$2,800 (in current dollars). These tuition and fee changes for all categories of private universities were in 1973-74 almost four times their public counterparts (see Figure A in Appendix B). If it is true that part-time students are apt to be closer to the margins of solvency than full-time students, then the rising prices of tuition may have forced them to seek less expensive alternatives.

Part-time enrollments at both public and private RU's I seem to respond much more readily to economic and social changes such as increased veterans' benefits and unemployment than do full-time enrollments (see Figure 4 and Tables IV and V).^{*} For example, in 1970 when veteran's benefits were substantially increased, part-time enrollments at the public RU's I increased 11 percent over 1969. At the end of the Vietnam War, in 1973, they dropped eight percent. Neither of these factors appear to have had substantial effects upon full-time enrollments (see Figures 3 and 4).

Male and Female Enrollments

Enrollment increases at Research Universities I since 1965 are due almost completely to the growing number of female students. Counting both full- and part-time enrollment, percentage gains for women are ten times more than for males (see Tables V and VI and Figures 5 and 6). Examining annual gains or losses, it is apparent the RU's I were almost in a steady state since 1966 in terms of male enrollment increases. However there has been a decrease of about 9,000 full-time male students since 1970 and a loss of 23,000 part-time males. This produces a net loss of about 16,500 FTE male students between 1970 and 1977 in RU's I. On the other hand, over the same time span there has been a gain of 79,000 full-time and 25,000 part-time women.

Although Research Universities I have not experienced gains as great as the national increases, substantial numbers of women have been added to the research university campuses (see Figure 6). The sexual equalitarian trend sweeping the nation during the past decade has therefore been shared by the elite universities, although it may be true that these institutions have been more passive than active participants.

In terms of full-time enrollees, the fall 1966 to 1977 male enrollment gains at RU's I were only 10 percent compared to 58 percent for females. For men there has been a slight loss in full-time enrollments since 1971 while the enrollment of women has increased steadily averaging 5.5 percent annually over the twelve-year period (see Figures 5 and 6).

^{*}See also Table A in Appendix B.

Table V. Full- and Part-Time Male Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FULL-TIME				PART-TIME			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1966	2,748	100.0	488,973	100.0	1,132	100.0	139,828	100.0
1967	2,941	107.0	512,562	104.8	1,218	107.6	138,368	99.0
1968	3,188	116.0	528,083	108.0	1,318	116.4	135,584	97.0
1969	3,349	121.9	545,306	111.7	1,376	121.6	135,717	95.5
1970	3,527	128.3	548,678	112.2	1,549	136.8	143,652	102.7
1971	3,655	133.0	549,302	112.3	1,588	140.3	130,341	93.2
1972	3,584	130.4	546,848	111.8	1,692	149.5	128,538	91.9
1973	3,610	131.4	545,541	111.6	1,804	159.4	118,208	84.5
1974	3,680	133.9	547,264	111.9	1,987	175.5	127,943	91.5
1975	3,965	144.3	551,694	112.8	2,233	197.3	132,016	94.4
1976	3,742	136.2	540,529	110.5	2,118	187.1	122,641	87.7
1977	3,705	134.8	539,523	110.3	2,181	192.7	120,795	86.6

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SOURCES: *Opening Fall Enrollments in Higher Education*, 1966 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

Table VI. Full- and Part-Time Female Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FULL-TIME				PART-TIME			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(100)	INDEX	N	INDEX
1966	1,721	100.0	235,555	100.0	837	100.0	87,220	100.0
1967	1,886	109.6	254,315	108.0	919	109.8	89,836	103.0
1968	2,062	119.8	274,655	116.6	1,003	119.8	88,672	101.7
1969	2,179	126.6	286,752	121.7	1,074	128.3	90,196	103.4
1970	2,338	135.8	291,989	124.0	1,235	147.6	93,501	107.2
1971	2,477	143.9	298,882	126.9	1,305	155.9	93,041	106.7
1972	2,548	148.1	308,407	130.9	1,474	176.1	97,538	111.8
1973	2,646	153.7	322,418	136.9	1,634	195.2	98,066	112.4
1974	2,763	160.6	336,563	142.9	1,892	226.1	107,972	123.8
1975	2,958	171.9	352,168	149.5	2,134	255.0	118,575	136.0
1976	3,061	177.9	359,763	152.7	2,200	262.8	114,309	131.1
1977	3,206	186.3	371,121	157.6	2,397	286.4	118,610	136.0

SOURCES: *Opening Fall Enrollments in Higher Education*, 1966 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF FULL AND PART-TIME MALE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

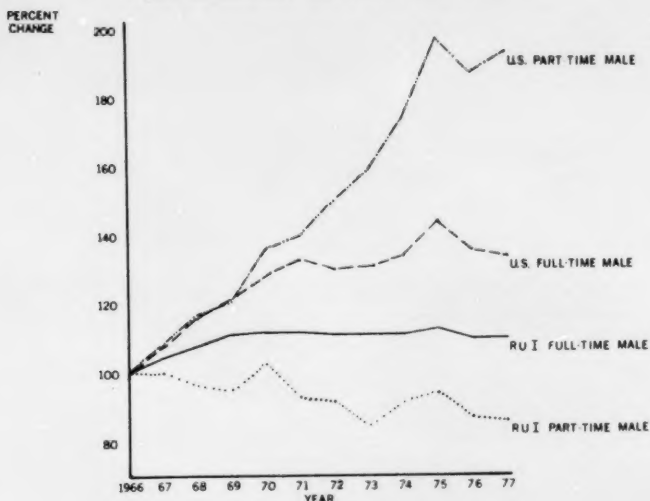


FIGURE 5

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF FULL AND PART-TIME FEMALE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

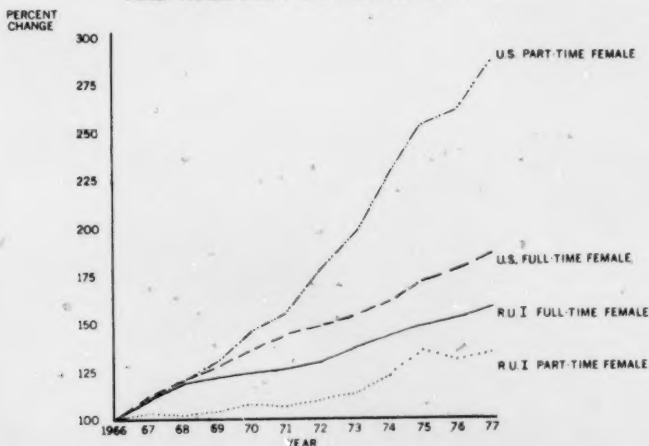


FIGURE 6

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

Surprisingly, 95 percent of the full-time enrollment growth within the twenty-two private research universities came through the addition of women. Only 1,700 more full-time men have been added since 1965 compared to 33,000 additional full-time women. Proportionately, the addition of women was greatest in those private institutions that have in the past been male strongholds: Cal. Tech., Princeton, M.I.T., and Yale to name a few.

The average annual gain of full-time women at the private RU's I has been a little over 6 percent. This is a slightly greater percentage than at the public RU's I (5 percent), but of course the total numbers of women added have been three times greater at the twenty-nine public research universities. Almost 150,000 more women carrying full academic loads were on campuses of Research Universities I in 1977 than in 1965. Since 1965, 33,000 full-time women were added to the private campuses and 116,000 to the public.

In 1965, women as full-time students represented 31 percent of the enrollment at RU's I both public and private; by fall 1977 their numbers had increased to forty percent of the total full-time enrollment (see Table VI).

Male part-time enrollments at Research Universities I decreased almost 19,000 from fall 1965 to fall 1977, but enrollments of part-time women were up by 38,000. All of the loss of part-time male enrollments occurred in the private RU's I, while a large portion of the gain in women part-time students took place in the public RU's I, although the gain in the private institutions was substantial (33 percent or 9,000 part-time women).

The public research universities show some reaction to terminating eligibility for Vietnam veterans. In 1976, when benefits ended for some 375,000 of them, male enrollment at the public RU's I declined by 20,000, all of which cannot be assumed to be veterans (see Figure 5 and Table V). Private RU's I showed only a slight loss in male enrollments in 1976, evidence perhaps that many veterans may have elected to pay lower tuitions at public institutions.

Private research universities seem to have been affected by the increases in federal student aid beginning in 1974 when basic educational opportunity grants began to be more heavily funded. In 1974 and 1975 both full- and part-time male students in these institutions increased at rates comparable to public ones. In 1977 the rate of enrollment growth for both men and women at the twenty-two private schools exceeded the twenty-nine public ones. (For discussion of the importance of student aid to private institutions, see Topical Paper No. 10, published by The Center for the Study of Higher Education, University of Arizona.)

Graduate and Undergraduate Enrollment Changes

As enrollments are subdivided into smaller categories, such as graduate and undergraduate, there are increasing problems with the data. For example, we were not able to separate graduate and undergraduate enrollments in 1965 and 1966 because national questionnaires did not do so. Further, in 1967 and 1968 graduate student data were collected by the Office of Education in the larger category of post-baccalaureate students, which included professional students, unclassified students with first degrees, and those working on a second bachelor's degree. The following graduate and undergraduate analyses are restricted therefore to the years 1967 through 1977 with the understanding that graduate enrollments in 1967 and 1968 may be slightly inflated by post-baccalaureate registrations not for graduate credit.

Undergraduate Enrollments

Undergraduate enrollments at the fifty-one major research universities grew at a faster rate than did graduate, and this growth was almost wholly attributable to the public institutions in the group. Full- and part-time undergraduate enrollments at the private research universities, in fact, declined by almost seven thousand students over this ten-year span (see Figure 7 and Table VII).

Full-Time Undergraduate Enrollments

Full-time undergraduate enrollments in both public and private research institutions increased by 108,000 students, a 19 percent increase over the ten years (see Table VII). In the private Research Universities I, full-time undergraduate enrollments increased by only four thousand students compared to 104,000 at the public. It may have been that the middle-income students at the private institution were forced to find alternatives to the increasing costs of the private research universities. Further, private research universities are more likely to enforce enrollment quotas than their public counterparts.

Part-Time Undergraduate Enrollments

Part-time undergraduate enrollments at the fifty-one schools went from 17 percent of the total undergraduate enrollments in 1967 to 15 percent in 1977. There was a 14,000 increase in part-time undergraduates at the public Research Universities I and an 11,000 decrease at the private. The year-to-year fluctuation in part-time undergraduate enrollments at both public and private RU's I has been much greater than the national fluctuations (see Figure 8).

Table VII. Full- and Part-Time Undergraduate Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FULL-TIME				PART-TIME			
	United States		Research Universities I		United States		Research Universities I	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1967	4,377	100.0	566,647	100.0	1,394	100.0	118,642	100.0
1968	4,779	109.2	597,833	105.5	1,752	125.7	125,275	105.6
1969	5,033	115.0	617,432	109.0	1,909	136.9	108,211	91.2
1970	5,327	121.7	627,057	110.7	2,106	151.1	110,857	93.4
1971	5,566	127.2	634,603	112.0	2,250	161.4	102,171	86.1
1972	5,545	126.7	637,506	112.5	2,474	177.5	106,334	89.6
1973	5,642	128.9	642,988	113.5	2,703	193.9	95,591	80.6
1974	5,795	132.4	656,404	115.8	3,094	222.0	110,222	92.9
1975	6,247	142.7	672,017	118.6	3,532	253.4	110,807	93.4
1976	6,113	139.7	667,324	117.8	3,419	245.3	119,975	101.1
1977	6,353*	145.1	675,329	119.2	3,757*	269.5	121,330	102.3

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1967 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF PUBLIC AND PRIVATE FULL-TIME UNDERGRADUATE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

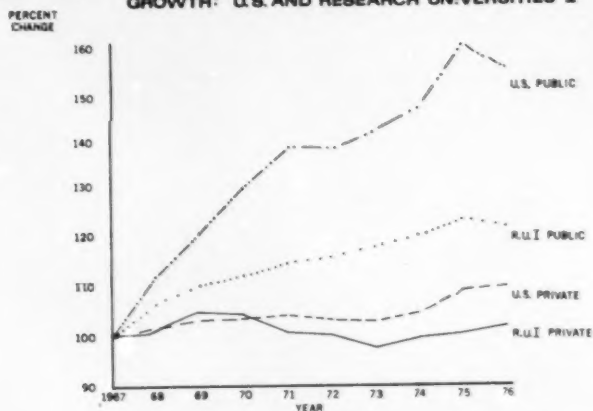


FIGURE 7

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION, 1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PUBLIC AND PRIVATE PART-TIME UNDERGRADUATE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

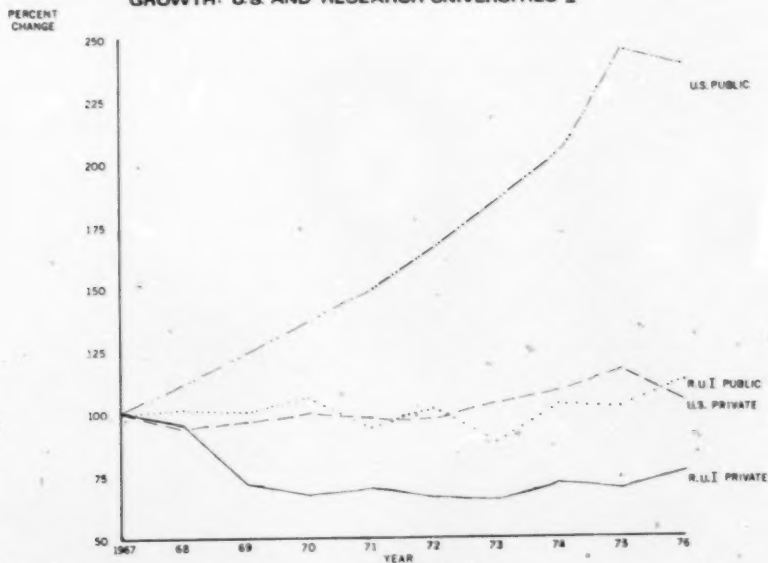


FIGURE 8

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION, 1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

Graduate Enrollments

There has been a 14 percent increase since 1967 in graduate enrollments in the fifty-one Research Universities I. Graduate enrollments grew at almost the same rate as undergraduate; the proportion, therefore, of graduates in the total student body in Research Universities I between 1967 and 1977 has remained almost constant.

Full-Time Graduate Enrollment

Nationally full-time graduate enrollments increased 51 percent between 1967 and 1977 while Research Universities I increased only 18 percent (see Table VIII). The total RU's I growth of full-time graduate students for the ten-year period was 35,000 students: 25,000 of these enrolled at public and 10,000 at private RU's I.

The growth of full-time graduates at the RU's I has been much more erratic than national growth. This is true of both the public and private institutions (see Figure 9 and Table VIII). Nor is the pattern of growth consistent for both the public and private institutions. In 1969, for example, full-time graduate enrollments went up at the public RU's I and down at the private. The following year they went down at the public and up at the private. Similar inconsistencies in growth can be seen for 1968, '71, '73, '74 and '76 (see Figure 9).

Part-Time Graduate Enrollment

Part-time graduate enrollments increased 56 percent nationally between 1967 and 1977 but only 8 percent for the RU's I (see Table VIII). Part-time graduate enrollments at Research Universities I increased 8,500 over that time span with the private RU's I losing and the public gaining over the period (see Figure 10). The sharpest decrease in enrollments occurred in 1976 when veterans' entitlement phased out by almost one-third. The public RU's I were much more affected by the loss than were private. There was a loss of 18,000 part-time graduates at the public RU's I and 5,000 at the private (see Figure 10).

Male and Female Graduate Enrollments

Although final data on male and female graduate students were not available at the time of publication of this paper some preliminary data were. The following analyses are based on those tentative data.

The increases in graduates at the fifty-one research universities is due solely to additional women students. The numbers of both full- and part-time male graduates declined at the twenty-two private institutions and full-time male

INDICES OF PUBLIC AND PRIVATE GRADUATE FULL-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

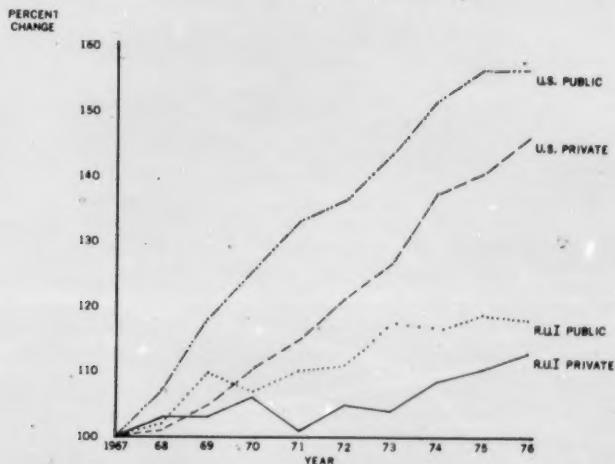


FIGURE 9

SOURCES: OPENING FALL ENROLLMENT IN HIGHER EDUCATION, 1967-1976, NCES
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PUBLIC AND PRIVATE GRADUATE PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES I

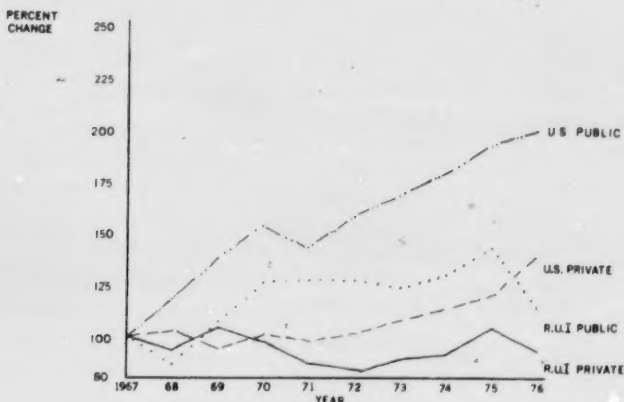


FIGURE 10

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION, 1967-1976, NCES
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

graduates also decreased at the public research institutions. Only part-time male graduates at the public RU's I increased and the increase in this single category does not nearly compensate for the decreases in the other three male groups. There were almost ten thousand fewer males in graduate programs at Research Universities I in 1976 than in 1969.

Females on the other hand increased dramatically as both full- and part-time graduates in both public and private research universities. Their greatest increases both in numbers and percentages were as part-time graduates at the public Research Universities I.

Despite the decrease of males and the increase of female graduates, men still outnumber women three to two in the fifty-one research schools. This however is an improvement over the 1969 ratio of five graduate males to two graduate females. Nationally in 1976 there were 15 percent more part-time female graduate students than male graduate students in public institutions and about 36 percent more part-time men graduates than women in private institutions.

RESEARCH UNIVERSITIES II

Summary of Findings

- The forty-seven Research Universities II increased in enrollments between 1965 and 1977 at a rate of 3.8 percent a year, slightly higher than RU's I but considerably lower than the 7.7 percent national increase.
- The greatest enrollment gain was in the thirty-three public institutions. They increased 229,000 students over the twelve-year period; the private institutions increased 23,000.
- The RU's II showed the same strong consistency in full-time enrollment growth that RU's I exhibited. Part-time enrollment growth, like the RU's I, was unstable and was affected by identical variables.
- Like their counterparts, RU's II showed strong and steady gains of women students throughout the period of time between 1965 and 1977. Women, in 1977, comprised 44 percent of the total enrollment of RU's II, a slightly higher proportion than at RU's I.
- Undergraduate and graduate students held much the same proportions of the total throughout the twelve-year period. Undergraduate and graduate full-time enrollments have been relatively stable but part-time enrollments at both levels have fluctuated in accordance with a number of variables.

Headcount Increases

The forty-seven Research Universities II (RU's II) in the United States gained slightly more than a quarter of a million students between 1965 and 1977 (see Appendix A for a list of Research Universities II). This represents 5 percent of the total gain for all institutions of higher education in the United States during this period. Over the twelve-year period the RU's II gained 46 percent compared to a 93 percent gain for all higher education institutions or a 3.8 gain per year for RU's II compared with a 7.7 percent gain for all higher education institutions (see Figure 11 and Table IX). The 3.8 percent annual rate for RU's II compares with a 2 percent annual rate for RU's I, confirming the earlier statement that the Research Universities I may not have been as responsive or as attractive to increasing student demand as institutions classified differently.

When the quarter of a million student gain is considered in the public and private sectors, it is apparent that the greatest gain both in number and percentage is in the thirty-three public RU's II. Public institutions increased 234,000 students over the twelve years; private RU's II increased about 23,000. The average annual gain at public RU's II was 4 percent; at private RU's II it was a little less than half of that (see Figure 11).

The highest annual rate of increase (7%) for RU's II came in 1975. There was some attenuation of the rate of growth in the fall of 1971, '72, '73 and '74 (see Table IX). The only year in which there was an actual decrease in enrollments was in 1976 when enrollments for all RU's II fell by over 13,000 students. There was nationally, however, a drop of about 170,000 students in all institutions of higher education. The enrollment drop in 1976 appeared to be the result of three major factors affecting enrollments the same year: veterans' entitlements began to run out, employment rates went up, and lowered birth rates of the late fifties diminished the 18- to 21-year-old group.

Public RU's II felt this proportionately the same as the private (see Table X). Each had about a 2 percent loss of students. In terms of total students, however, the public RU's II lost over 11,000 students, the private approximately 2,000 (see Figure 11). RU's II felt the impact less than RU's I — they experienced an 18,000 student loss between 1975 and 1976; there were, however, slightly more RU's I institutions to absorb the loss.

Full-Time-Equivalent Students

Full-time-equivalent (FTE) enrollments* at both public and private RU's II increased by a greater percentage (47.6) over the period than did headcounts

*Full time plus 1/3 of part time.

Table IX. Full-time-equivalent and Headcount Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FTE				HEADCOUNT			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1965	4,826*	100.0	462,162	100.0	5,962*	100.0	559,024	100.0
1966	5,126	106.2	491,718	106.4	6,439	108.0	592,220	105.9
1967	5,539	114.8	511,666	110.7	6,964	116.8	616,692	110.3
1968	6,024	124.8	536,833	116.2	7,571	127.0	641,860	114.8
1969	6,346	131.5	560,444	121.3	7,979	133.8	676,133	120.9
1970	6,793	140.8	588,749	127.4	8,649	145.1	708,306	126.7
1971	7,096	147.0	611,036	132.2	9,025	151.4	729,663	130.5
1972	7,187	148.9	621,079	134.4	9,297	155.9	741,252	132.6
1973	7,403	153.4	632,560	136.9	9,695	162.6	756,807	135.4
1974	7,735	160.3	650,241	140.7	10,321	173.1	780,330	139.6
1975	8,379	173.6	682,531	147.7	11,291	189.4	822,700	147.2
1976	8,242	170.8	676,633	146.4	11,121	186.5	809,400	144.8
1977	8,436	174.8	682,136	147.6	11,488	192.5	816,389	146.0

*Non-degree registrations estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

Table X. Public and Private Headcount Enrollments and Indices of Growth:
U.S. and Research Universities II.

	PUBLIC				PRIVATE			
	United States		Research Universities II		United States		Research Universities II	
	N	INDEX	N	INDEX	N	INDEX	N	INDEX
1965	3,999,940	100.0	452,861	100.0	1,967,471	100.0	106,163	100.0
1966	4,381,086	109.5	480,673	106.1	2,057,391	104.6	111,547	105.1
1967	4,850,330	121.3	507,869	112.1	2,113,357	107.4	108,823	102.5
1968	5,469,492	136.7	531,769	117.4	2,102,164	106.8	110,091	103.7
1969	5,939,513	148.5	565,035	124.8	2,126,720	108.1	111,098	104.6
1970	6,476,058	161.9	595,679	131.5	2,173,310	110.5	112,627	106.1
1971	6,854,685	171.4	614,279	135.6	2,170,346	110.3	115,384	108.7
1972	7,122,875	178.1	623,339	137.6	2,174,912	110.5	117,913	111.1
1973	7,478,407	187.0	636,753	140.6	2,215,890	112.6	120,054	113.1
1974	8,049,595	201.2	655,763	144.8	2,271,944	115.5	124,567	117.3
1975	8,896,021	222.4	696,223	153.7	2,394,698	121.7	126,477	119.1
1976	8,712,634	217.8	684,975	151.3	2,408,792	122.4	124,425	117.2
1977	8,985,175	224.6	686,822	151.7	2,502,792	127.2	129,567	122.0

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II (PUBLIC AND PRIVATE)

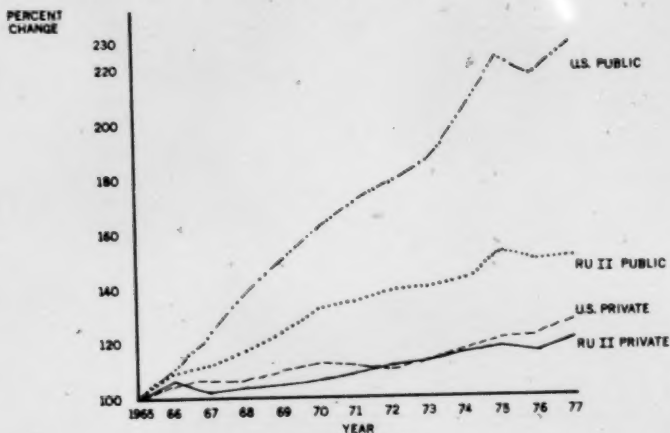


FIGURE 11

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION, 1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF FULL AND PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

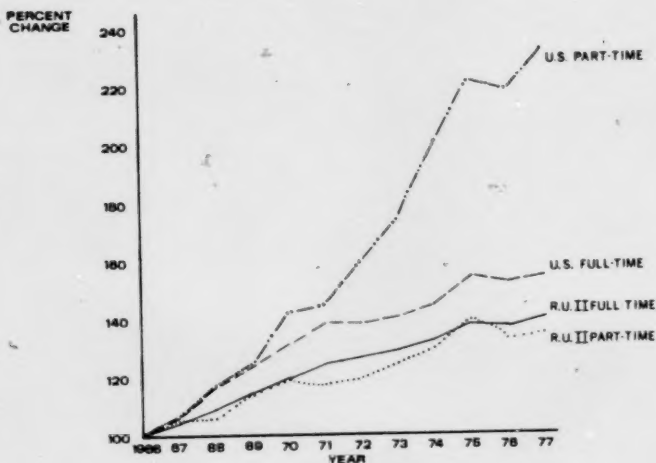


FIGURE 12

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION, 1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

(46.0) indicating that full-time students increased at greater rates than did part-time (see Table IX). FTE enrollments at private RU's II increased 24 percent between 1965 and 1977 while FTE enrollments at public RU's II increased 53 percent in the same period. A detailed analysis of full- and part-time students follows.

Full- and Part-Time Students

Full-Time Students

In 1977, full-time students represented 75 percent of the total enrollments of RU's II, somewhat less than the 80 percent they represented at RU's I but substantially more than the 60 percent full-time students represented of total enrollments nationally. While nationally full-time students by 1977 increased 55 percent over 1966, the increase for the same time period was 39 percent for the RU's II (see Table XI and Figure 12).

Public RU's II have a higher percentage of full-time students than do private RU's II (76 percent compared to 71 percent). For both the public and private institutions this percentage is virtually the same as it was ten years earlier. In this respect the enrollment characteristics of these institutions show the same strong stability that the RU's I displayed. There was a loss of full-time students in only one year (1976) in the thirty-three public institutions, and in two years (1967 and 1975) in the fourteen private ones. In 1966 there were substantial increases in full-time students at both the public and private RU's II. There were also large increases from 1967, up to 1975 in the public institutions (see Tables XI and XII and Figure 13).

Part-Time Students

In 1977, about one quarter of the public and 29 percent of the private RU's II institutions' enrollments were part time. These proportions are close to those at RU's I. Part-time enrollments in both the public and private RU's II fluctuate somewhat more than full-time enrollments, observing some of the same patterns, and presumably affected by some of the same variables associated with part-time enrollment increases and decreases observed in RU's I. But part-time enrollments in the public and private RU's II appear to have experienced a somewhat more stable pattern of change than the RU's I (compare Figures 4 and 14 to see this difference). For both public and private RU's II, part-time enrollment increases averaged 4,300 a year over the twelve-year period compared to a 15,500 annual increase for full-time students. The public RU's II accounted for 91 percent of both the part-time and full-time enrollment gains in RU's II.

Table XI. Full- and Part-Time Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FULL-TIME				PART-TIME			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1966	4,470	100.0	441,467	100.0	1,969	100.0	150,753	100.0
1967	4,827	108.0	459,153	104.0	2,137	108.5	157,539	104.5
1968	5,250	117.4	484,320	109.7	2,321	117.9	157,540	104.5
1969	5,529	123.7	502,600	113.8	2,450	124.4	173,533	115.1
1970	5,865	131.2	528,971	119.8	2,784	141.4	179,335	119.0
1971	6,132	137.2	551,772	125.0	2,893	146.9	177,941	118.0
1972	6,131	137.2	560,993	127.1	3,166	160.8	180,259	119.6
1973	6,257	140.0	570,437	129.2	3,438	174.6	186,370	123.6
1974	6,442	144.1	585,197	132.6	3,879	197.0	195,133	129.4
1975	6,923	154.9	612,446	138.7	4,368	221.8	210,254	139.5
1976	6,803	152.2	610,249	138.2	4,318	219.3	199,151	132.1
1977	6,910	154.6	615,009	139.3	4,578	232.5	201,380	133.6

Table XII. Full-Time Public and Private Enrollments and Indices of Growth:
U.S. and Research Universities II.

	PUBLIC				PRIVATE			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1965	2,555*	100.0	339,858	100.0	1,382*	100.0	73,873	100.0
1966	2,967*	116.1	363,385	106.9	1,503*	108.8	78,082	105.7
1967	3,281	128.4	383,123	112.7	1,546	111.9	76,030	102.9
1968	3,684	144.2	406,427	119.6	1,566	113.3	77,893	105.4
1969	3,948	154.5	423,591	124.6	1,594	115.3	79,009	106.9
1970	4,249	166.3	448,678	132.0	1,616	116.9	80,293	108.7
1971	4,503	176.2	469,097	138.0	1,629	117.9	82,625	111.8
1972	4,504	176.3	475,478	139.9	1,627	117.7	85,515	115.8
1973	4,624	181.0	483,801	142.4	1,632	118.1	86,636	117.3
1974	4,781	187.1	494,714	145.6	1,661	120.2	90,483	122.5
1975	5,179	202.7	522,688	153.8	1,744	126.2	89,758	121.5
1976	5,039	197.2	519,577	152.9	1,763	127.6	90,672	122.7
1977	5,084	199.0	522,700	153.8	1,826	132.1	92,309	124.9

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1965 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF PUBLIC AND PRIVATE FULL-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

PERCENT
CHANGE

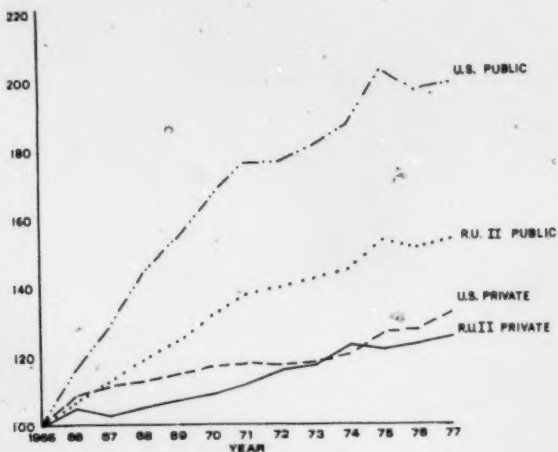


FIGURE 13

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1965-1977, NCES.

THE CHRONICLE OF HIGHER EDUCATION, JANUARY 9, 1978.

INDICES OF PUBLIC AND PRIVATE PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

PERCENT
CHANGE

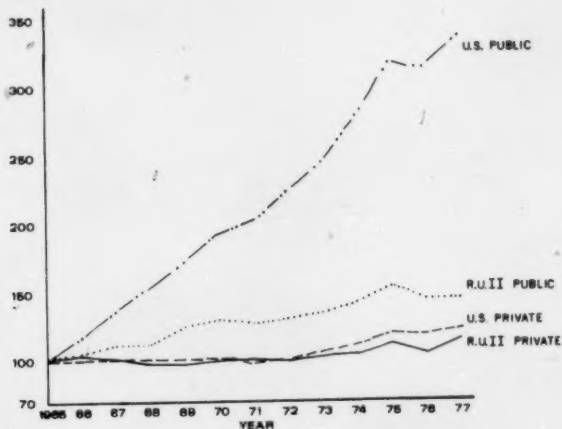


FIGURE 14

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1965-1977, NCES.

HEGIS ENROLLMENT DATA (COMPUTER TAPES)

THE CHRONICLE OF HIGHER EDUCATION, JANUARY 9, 1978

NOTE: U.S. PUBLIC AND PRIVATE PART-TIME ENROLLMENT GROWTH
ESTIMATED TO 1969.

It is obvious that neither the RU's I nor the RU's II have participated importantly in the great national increases in part-time enrollments, and considering the nature of these institutions with strong graduate and research programs that lack of participation does not seem amiss (see Figures 4 and 14).

Male and Female Enrollments

Like their counterparts, RU's II show strong and steady gains of women students throughout the period 1965 to 1977 (see Table XIII and Figure 15). Full- and part-time women increased 90 percent (from 187,000 to 356,000) over this period whereas full- and part-time males increased only 24 percent. Women now comprise 44 percent of the enrollments of RU's II. In 1965, they constituted one-third of enrollments. Although women students have not increased at RU's II at the extremely high rate they have nationally (over 120 percent), their rate of increase was higher at RU's II than it was at RU's I by seventeen percentage points. Both full-time and part-time women students show substantial increases at RU's II with full-time increasing 123,000 or 91 percent since 1965 and part-time 46,000 or 87 percent. This is considerably more than the increase at RU's I despite the fact that there are fewer Research Universities II (see Table XIII).

Increases for men, on the other hand, have been modest: full-time males increased 28 percent since 1965 and part-time only 11 percent (see Table XIV and Figure 16). There were decreases in combined full-time and part-time male enrollment at RU's II in 1972, '73, '76 and '77. The first decrease is associated with declining gains in the 18- to 24-year-old cohort. In 1973, at the end of the Vietnam War, the second year of decrease, public full-time male enrollments were virtually the same but decreased by less than a percentage point in private RU's II (see Figure 15 and Table XI). The last two decreases came with the phasing out of veteran's entitlements and smaller increases in the college age cohort. These decreases in the college age cohort, however, did not seem to affect enrollment increases of females in 1972 or 1973, in both of which years strong gains were recorded.

Graduate-Undergraduate Enrollments

In 1977, undergraduate enrollments represented almost three quarters (74 percent) of the total enrollment at RU's II, the same percentage it was in 1967 (see Table XV and Figure 17).^{*} Unlike RU's I, where undergraduate enrollments were increasing at a slightly faster rate than graduate, both levels have remained stable at RU's II since 1967. In 1977, part-time undergraduates represented 16 percent of both public and private RU's II undergraduates. Part-time graduates

^{*}Graduate-undergraduate disaggregations are possible for 1967 through 1977 only.

Table XIII. Full- and Part-Time Female Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FULL-TIME				PART-TIME			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1966	1,721	100.0	148,042	100.0	837	100.0	56,598	100.0
1967	1,886	109.6	158,014	106.7	919	109.8	60,434	106.8
1968	2,062	119.8	169,819	114.7	1,003	119.8	59,916	105.9
1969	2,179	126.6	179,504	121.3	1,074	128.3	66,600	117.7
1970	2,338	135.8	190,287	128.5	1,235	147.6	70,242	124.1
1971	2,477	143.9	201,169	135.9	1,305	155.9	72,239	127.6
1972	2,548	148.1	211,493	142.9	1,474	176.1	75,562	133.5
1973	2,646	153.7	221,703	149.8	1,634	195.2	80,557	142.3
1974	2,763	160.6	233,248	157.6	1,892	226.1	88,858	157.0
1975	2,958	171.9	246,963	166.8	2,134	255.0	97,323	172.0
1976	3,061	177.9	252,607	170.6	2,200	262.8	95,187	168.2
1977	3,206	186.3	257,874	174.2	2,397	286.4	97,853	172.9

SOURCES: *Opening Fall Enrollments in Higher Education*, 1966 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

Table VIII. Full- and Part-Time Graduate Enrollments and Indices of Growth:
U.S. and Research Universities I.

	FULL-TIME				PART-TIME			
	United States		Research Universities I		United States		Research Universities I	
	N	INDEX	N	INDEX	N	INDEX	N	INDEX
1967	450,436	100.0	200,230	100.0	449,529	100.0	109,562	100.0
1968	471,693	104.7	204,905	102.0	569,469	126.7	98,981	90.3
1969	508,548	112.9	214,626	107.2	615,799	137.0	117,702	107.4
1970	538,050	119.5	213,610	106.7	678,355	150.9	126,296	115.3
1971	566,508	125.8	213,581	106.7	642,805	143.0	121,211	110.6
1972	586,054	130.1	217,749	108.7	692,580	154.1	119,792	109.3
1973	614,397	136.4	224,971	112.4	734,812	163.5	120,683	110.2
1974	647,159	143.7	227,423	113.6	784,997	174.6	125,693	114.7
1975	675,829	150.0	231,845	115.8	835,666	186.0	139,784	127.6
1976	686,141	152.3	232,968	116.4	897,358	199.6	116,975	106.8
1977	677,790*	150.5	235,315	117.5	700,766*	156.0	118,075	107.8

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1967 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

Table XIV. Full- and Part-Time Male Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FULL-TIME				PART-TIME			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1966	2,748	100.0	293,425	100.0	1,132	100.0	94,155	100.0
1967	2,941	107.0	301,139	102.6	1,218	107.6	97,105	103.1
1968	3,188	116.0	314,501	107.2	1,318	116.4	97,624	103.7
1969	3,349	121.9	323,096	110.1	1,376	121.6	106,933	113.6
1970	3,527	128.3	338,684	115.4	1,549	136.8	109,093	115.9
1971	3,655	133.0	350,553	119.5	1,588	140.3	105,702	112.3
1972	3,584	130.4	349,500	119.1	1,692	149.5	104,697	111.2
1973	3,610	131.4	348,734	118.8	1,804	159.4	105,813	112.4
1974	3,680	133.9	351,949	119.9	1,987	175.5	106,275	112.9
1975	3,965	144.3	365,483	124.6	2,233	197.3	112,931	119.9
1976	3,742	136.2	357,642	121.9	2,118	187.1	103,964	110.4
1977	3,705	134.8	357,135	121.7	2,181	192.7	103,527	110.0

SOURCES: *Opening Fall Enrollments in Higher Education*, 1966 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

Table XV. Full- and Part-Time Undergraduate Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FULL-TIME				PART-TIME			
	United States		Research Universities II		United States		Research Universities II	
	N(1000)	INDEX	N	INDEX	N(1000)	INDEX	N	INDEX
1967	4,377	100.0	379,145	100.0	1,394	100.0	75,401	100.0
1968	4,779	109.2	398,519	105.1	1,752	125.7	81,186	107.7
1969	5,033	115.0	411,207	108.5	1,909	136.9	81,247	107.8
1970	5,327	121.7	430,023	113.4	2,106	151.1	84,371	111.9
1971	5,566	127.2	446,770	117.8	2,250	161.4	81,607	108.2
1972	5,545	126.7	454,495	119.9	2,474	177.5	85,965	114.0
1973	5,642	128.9	463,615	122.3	2,703	193.9	82,941	110.0
1974	5,795	132.4	475,415	125.4	3,094	222.0	83,310	110.5
1975	6,247	142.7	499,410	131.7	3,532	253.4	89,374	118.5
1976	6,113	139.7	497,536	131.2	3,419	245.3	92,979	123.3
1977	6,353*	145.1	502,915	132.6	3,757*	269.5	99,098	131.4

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1967 to 1976, NCES.
The Chronicle of Higher Education, January 9, 1978.

INDICES OF FULL AND PART-TIME FEMALE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

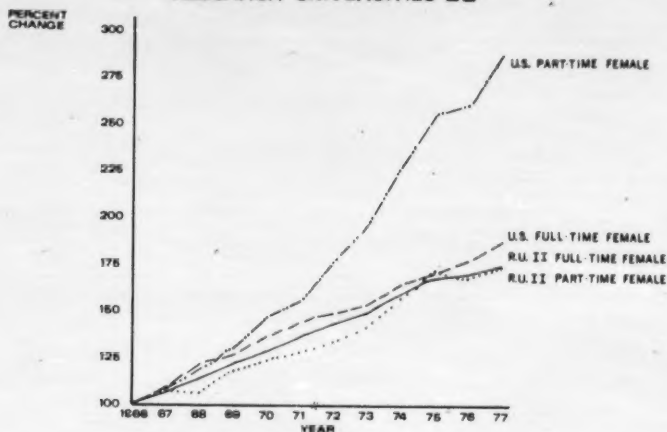


FIGURE 15

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF FULL AND PART-TIME MALE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

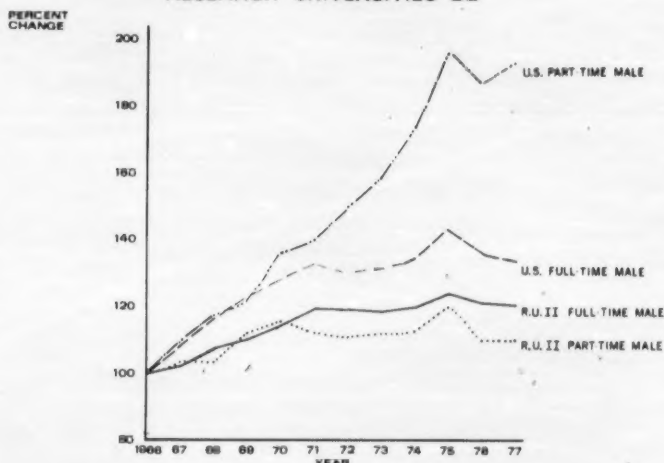


FIGURE 16

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1966-1977, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

represented 46 percent of private and 48 percent of public RU's II graduate enrollments -- much higher figures than for RU's I.

Undergraduate full-time enrollment increases have been relatively stable at both private and public RU's II with enrollment increases between 1967 and 1977 reflecting somewhat changes in the size of the 18- to 24-year-old cohort (see Figure 17 and Table B in Appendix B). There seems to be one notable exception to this observation. In 1975, one year before veterans' entitlements began phasing out, undergraduate full-time enrollments did not increase at private RU's II, but increased by almost 6 percent at the thirty-three public institutions (see Figure 17).

Part-time enrollments, both graduate and undergraduate, have fluctuated considerably at the private and public institutions (see Figures 18 and 20). This appears to be the result of a number of factors including changing unemployment rates, increases in veterans' benefits, the phasing out of veterans' entitlements, and changes in military draft regulations -- the same factors which were assumed to affect part-time enrollments in RU's I (see p. 15).

Thus in 1969, the September before the rules for the military draft changed from board selection and deferment to lottery selection, part-time undergraduate enrollments at private RU's II were down 28 percent from the previous year for a loss of 3,300 students and the gain in the public RU's II was 2 percentage points fewer than the previous year.

Graduate full-time enrollment increases have been fairly steady from 1967 to 1975. They dropped slightly for the first time in 1976 and again in 1977. Over the ten-year period the rate of growth in public RU's II (49 percent) has been more than twice the rate in the private (20 percent).

Graduate part-time enrollment changes are also associated with the factors affecting part-time undergraduate enrollments but in terms of increases rather than decreases in enrollments (see Table XVI and Figure 20). Changing to a lottery selection method for draft choices in 1969 is associated with an increase of 13,000 part-time graduate enrollments in public and 3,000 in private RU's II.

If the popular conception of draft deferment by college attendance is valid, at the inception of the lottery system in 1969 (or at least in the following year since the change took place in the fall) we should find decreases in full-time male undergraduate and graduate enrollments and possibly increases in part-time male enrollment. This conclusion would seem to follow because full-time attendance was required under the earlier system for all college deferments, but under the lottery full-time attendance was deemed necessary only by those who were about to be drafted and who sought deferments.

Table XVI. Full- and Part-Time Graduate Enrollments and Indices of Growth:
U.S. and Research Universities II.

	FULL-TIME				PART-TIME			
	United States		Research Universities II		United States		Research Universities II	
	N	INDEX	N	INDEX	N	INDEX	N	INDEX
1967	450,436	100.0	80,008	100.0	449,529	100.0	82,138	100.0
1968	471,693	104.7	85,801	107.2	569,459	126.7	76,354	93.0
1969	508,548	112.9	91,393	114.2	615,799	137.0	92,286	112.4
1970	538,050	119.5	98,948	123.7	678,355	150.9	94,964	115.6
1971	566,508	125.8	104,952	131.2	642,805	143.0	96,334	117.3
1972	586,054	130.1	106,498	133.1	692,580	154.1	94,294	114.8
1973	614,397	136.4	106,822	133.5	734,812	163.5	103,429	125.9
1974	647,159	143.7	109,782	137.2	784,997	174.6	111,823	136.1
1975	675,829	150.0	113,036	141.3	835,666	186.0	120,880	147.2
1976	687,141	152.6	112,713	140.9	897,358	199.6	106,172	129.3
1977	677,790*	150.5	112,094	140.1	700,766*	156.0	102,282	124.5

*Estimated

SOURCES: *Opening Fall Enrollments in Higher Education*, 1967 to 1976, NCES.

The Chronicle of Higher Education, January 9, 1978.

INDICES OF PUBLIC AND PRIVATE FULL-TIME UNDERGRADATE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

PERCENT
CHANGE

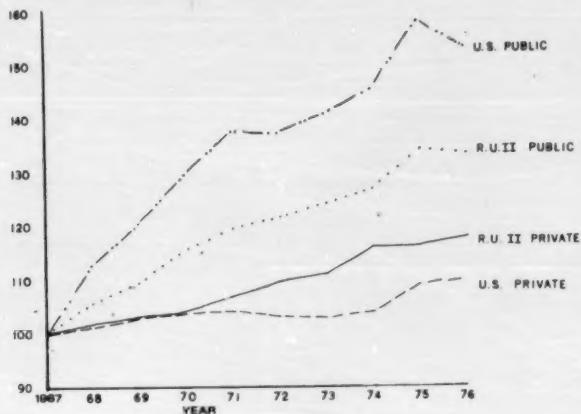


FIGURE 17

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION.
1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PUBLIC AND PRIVATE PART-TIME UNDERGRADUATE ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

PERCENT
CHANGE

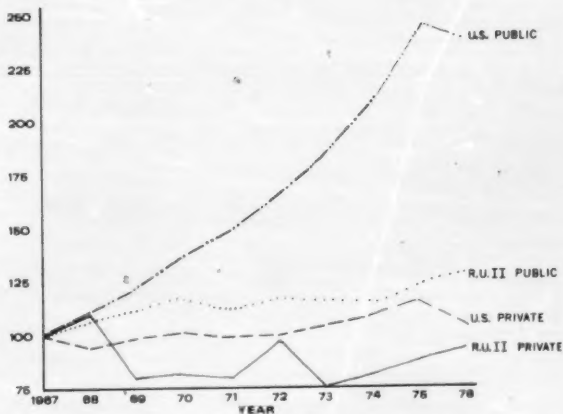


FIGURE 18

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION.
1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PUBLIC AND PRIVATE GRADUATE FULL-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

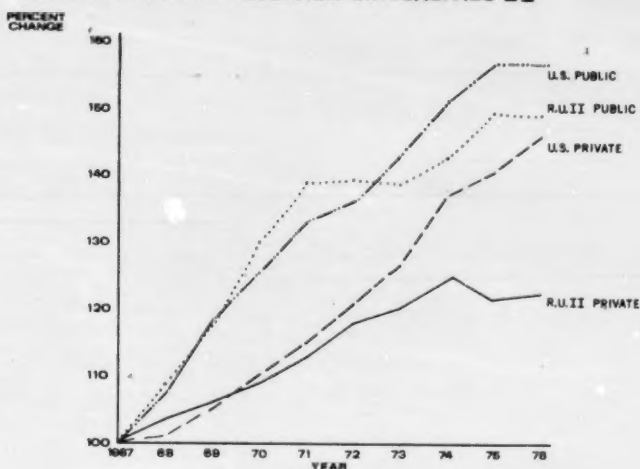


FIGURE 19

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

INDICES OF PUBLIC AND PRIVATE GRADUATE PART-TIME ENROLLMENT GROWTH: U.S. AND RESEARCH UNIVERSITIES II

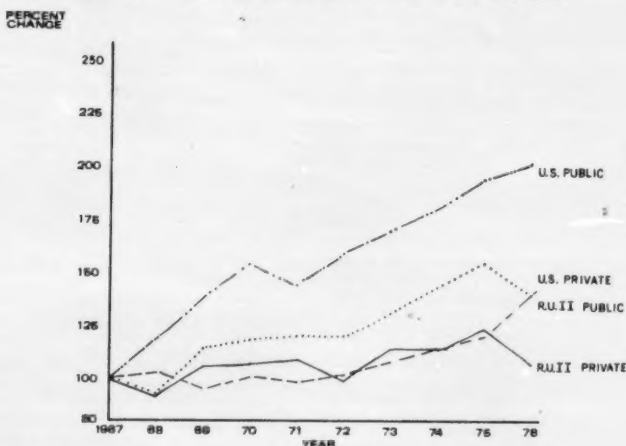


FIGURE 20

SOURCES: OPENING FALL ENROLLMENTS IN HIGHER EDUCATION,
1967-1976, NCES.
HEGIS ENROLLMENT DATA (COMPUTER TAPES)

Both undergraduate and graduate male enrollment changes do not support this thesis: male full-time enrollments increased and part-time decreased in 1969 and '70 for both graduate and undergraduates. Decreases in male full-time enrollment caused by the lottery may be masked by returning veterans using their entitlements.

In 1974 and '75, shortly before the G.I. Bill began phasing out and as the draft ended altogether in favor of a volunteer army, part-time graduate enrollments in public RU's II increased first 11 percent in 1974 and then 8 percent in the following year. In 1973, there was a 15 percent increase in part-time graduate enrollments in the private RU's II (see Table XVI and Figure 20). Although part of this growth was due to increases in women, it seems reasonable to conclude that, with the draft ended in favor of a volunteer army, many who had deferred college going now began more confidently to plan their careers and with the end of entitlements in sight many veterans began to take advantage of part-time educational benefits.

The first year in which veterans' benefits began phasing out (1976), part-time graduate enrollments at public and private RU's II decreased 12 and 13 percent respectively which translated into an 11,000 part-time student drop at public and 3,600 decrease at private RU's II. Part-time undergraduate enrollments at both public and private RU's II increased this same year. It is evident that political and economic policies have had and will continue to have strong effects upon enrollment in major research universities.

APPENDIX A

RESEARCH UNIVERSITIES I

The fifty-one leading universities in terms of federal financial support of academic science in at least two of the three academic years, 1972-73, 1973-74 and 1974-75, provided they awarded at least fifty Ph.D.'s (plus M.D.'s if a medical school was on the same campus) in 1973-74. Rockefeller University was included because of the high quality of its research and doctoral training, even though it did not meet these criteria.

University of Arizona	University of Michigan, Ann Arbor
Boston University	University of Minnesota of
University of California, Berkeley	Minneapolis-St. Paul
University of California, Davis	University of Missouri, Columbia
University of California,	New York University
Los Angeles	North Carolina State University
University of California,	at Raleigh
San Diego	University of North Carolina at
California Institute of Technology	Chapel Hill
Case Western Reserve University	Northwestern University
University of Chicago	Ohio State University, Main Campus
Colorado State University	Oregon State University
University of Colorado at	Pennsylvania State University,
Boulder	Main Campus
Columbia University, Main Campus	University of Pennsylvania
Cornell University	University of Pittsburgh,
(Endowed Colleges)	Main Campus
Duke University	Princeton University
University of Florida	Purdue University, Main Campus
University of Georgia	University of Rochester
Harvard University	Rockefeller University
University of Hawaii at Manoa	University of Southern California
University of Illinois, Urbana	Stanford University
Campus	Texas Agricultural and Mechanical
University of Iowa	University, Main Campus
Johns Hopkins University	University of Texas at Austin
University of Maryland, College	University of Utah
Park Campus	Yale University
Massachusetts Institute of	Yeshiva University
Technology	Washington University
University of Miami	University of Washington
Michigan State University	University of Wisconsin, Madison

RESEARCH UNIVERSITIES II

These universities were on the list of the 100 leading institutions in terms of federal financial support in at least two out of three years between 1972-73 and 1974-75 and awarded at least fifty Ph.D.'s (plus M.D.'s if a medical school was on the same campus) in 1973-74. At least twenty-five of these degrees must have been Ph.D.'s. Alternatively, the institution was among the leading sixty institutions in terms of the total number of Ph.D.'s awarded during the years from 1965-66 to 1974-75. In addition, a few institutions that did not quite meet these criteria, but that have graduate programs of high quality and with impressive promise for future development, have been included in this category.

Auburn University, Main Campus
 University of Arkansas,
 Main Campus
 Brandeis University
 Brown University
 University of California, Irvine
 Carnegie-Mellon University
 Catholic University of America
 University of Cincinnati,
 Main Campus
 Claremont University Center
 and Claremont Graduate
 School
 University of Connecticut,
 Main Campus
 Emory University
 Florida State University
 George Washington University
 Georgetown University
 Georgia Institute of Technology,
 Main Campus
 Howard University
 Indiana State University at
 Bloomington
 Iowa State University of
 Science and Technology
 Kansas State University of
 Agriculture and Applied Sciences
 University of Kentucky
 Louisiana State University and
 Agricultural and Mechanical
 College at Baton Rouge
 University of Massachusetts,
 Amherst

Mississippi State University
 University of Nebraska, Lincoln
 City University of New York
 Graduate School and University
 Center
 State University of New York at
 Stony Brook, Main Campus
 Oklahoma State University,
 Main Campus
 University of Oklahoma,
 Norman Campus
 University of Oregon, Main Campus
 Rutgers, The State University of
 New Jersey, New Brunswick
 Campus
 Saint Louis University, Main Campus
 Syracuse University, Main Campus
 Temple University
 University of Tennessee
 at Knoxville
 Tufts University
 Utah State University
 Vanderbilt University
 University of Vermont and
 State Agricultural College
 University of Virginia,
 Main Campus
 Virginia Polytechnic Institute
 and State University
 Washington State University
 Wayne State University
 West Virginia University

APPENDIX B

TABLE A

- 1965 HIGHER EDUCATION ACT OF 1965**
- Matching funds for social programs
 - NDEA loans
 - Title IV (graduate) fellowships
 - The first economic opportunity grants
 - Work-Study
 - Guaranteed Student Loans
- 1966 Increase in NDEA, Work-Study, and Grant Funding**
- 1967 Continued increase in NDEA, Work-Study, and Grant Funding**
EXECUTIVE ORDER 11375 (Non-discrimination on the basis of sex)
SELECTIVE SERVICE ACT AMENDED (June)
- those enlisted in reserves before the age of 26 would be deferred from training and service as long as he serves as a member of said reserves
 - deferment for persons with wives and children "on individual basis"
 - deferment for college attendance through baccalaureate degree upon request
 - deferment to graduate students on individual basis for study necessary to the maintenance of the national health, safety or interest
- 1968 End of Title IV fellowships (3-year fellowships awarded this year ran out in 1971)**
- 1969 SELECTIVE SERVICE ACT AMENDED**
- Establishment of draft lottery to go into effect early 1970. Prime age 19-20; persons with deferments or exemptions continued to hold same until deferments or exemptions terminated, then placed in 19-20 age group.
- 1970 VETERANS EDUCATION & TRAINING AMENDMENTS ACT (March 1970)**
- Increase in veterans benefits by approximately 34½%
- 1971 No more Title IV fellowships**

- 1972 HIGHER EDUCATION AMENDMENTS OF 1972
— Shift in funding from institutions to students
- 1973 END OF VIET NAM WAR
REHABILITATION ACT
- 1974 Heavy BEOG Funding
- 1975 END OF DRAFT (May 7)
— Job scarcity
— Recession
- 1976 End of some veterans' benefits (June 1976) Loss of more than 33%
veteran enrollment

TABLE B

18-24 Year Old Cohort
1965-1977

	Total	Male	Female
1965	20,292,000	10,212,000	10,081,000
1966	21,376,000	10,765,000	10,609,000
1967	22,327,000	11,246,000	11,082,000
1968	22,883,000	11,523,000	11,361,000
1969	23,723,000	11,949,000	11,775,000
1970	24,625,000	12,424,000	12,201,000
1971	25,701,000	12,978,000	12,722,000
1972	25,942,000	13,107,000	12,835,000
1973	26,462,000	13,379,000	13,083,000
1974	27,004,000	13,667,000	13,337,000
1975	27,714,000	14,036,000	13,678,000
1976	28,227,000	14,303,000	13,924,000
1977	28,714,000	14,551,000	14,163,000

Source: ¹Estimates of the Population of the United States, by Age, Sex, and Race: April 1, 1960 to July 1, 1973, *Current Population Reports, Bureau of the Census*, Series P-25, No. 519, April 1974, pp. 16-20.

²Projections of the Population of the United States, by Age and Sex: 1970-2020, *Current Population Reports, Bureau of the Census*, Series P-25, No. 470, November 1971, p. 13.

(Years 1965-1969 were taken from publication #1 and years 1970-1977 were taken from publication #2 above.)

	1965		1966		1967		1968		1969		1970		1971		1972		1973		1974		1975		1976	
	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time
I. DEGREE CREDIT																								
A. Resident																								
1. Undergraduate																								
a. Lower Division									2	2	5	5	5	8	5	5								
b. Upper Division									5	5	5	5	5	5	5	5								
Total-Undergraduate					5	5			5	5	5	5	5	5	5	5								
2. First-Professional									5	5	5	5	5	5	5	5								
3. Graduate					5	5			5	5	5	5	5	5	5	5								
4. Unclassified									5	5	5	5	5	5	5	5								
Total-Resident			5	5					5	5	5	5	5	5	5	5								
B. Extension																								
1. Undergraduate									5	5			5	5										
2. First-Professional/Graduate									5	5			5	5										
3. Unclassified									5	5	5	5	5	5	5	5								
Total-Extension			5		5				5	5	5	5	5	5	5	5								
C. Resident And Extension																								
1. Undergraduate																	5	5	5	5	5	5		
a. Lower Division																	5	5	5	5	5	5		
b. Upper Division																	5	5	5	5	5	5		
Total-Undergraduate							5	5									5	5	5	5	5	5	50	50
2. First-Professional																	5	5	5	5	5	5	50	50
3. Graduate							5	5									5	5	5	5	5	5	50	50
4. Unclassified																	5	5	5	5	5	5	50	50
Total-Resident And Extension	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5								
D. First Time Degree Credit																								
Total-First Time Degree Credit	5	5	5	5	5	5			5	5	5	5	5	5	5	5	5	5	5	5	5	5	50	50
II. NON-DEGREE CREDIT																								
A. Resident									5	5	5	5	5	5	5	5								
B. Extension									5	5			5	5										
C. Resident And Extension	5						5	5	5	5	5	5	5	5	5	5	5	5	5	5	5			
D. First Time Non-Degree Credit							5	5			5	5	5	5	5	5	5	5	5	5	5			
III. GRAND TOTAL									5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

5 - Data separated by sex.

50 - (Un)classified degree credit and non-degree credit separated by sex.

NOTE: If space is blank, category is not available.

APPENDIX C

BASIC STUDENT TUITION FOR UNIVERSITIES: YEARS 1965-1977

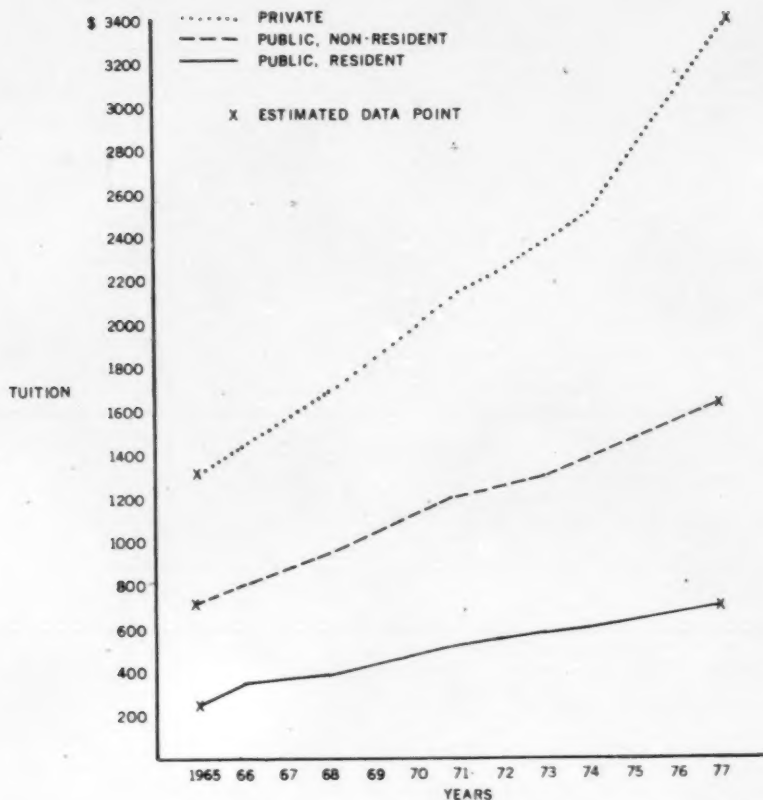


FIGURE A

Source: Digest of Educational Statistics, National Center for Education Statistics,
U.S. Department of Health, Education, and Welfare/Education Division,
Years: 1965-1977

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